



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/576,232

07/14/2006

Mitsuhiro Hamashima

URBA:004

7091

37013 7590 06/23/2009
ROSSI, KIMMS & McDOWELL LLP.
20609 Gordon Park Square, Suite 150
Ashburn, VA 20147

EXAMINER

CHACKO, SUNIL

ART UNIT

PAPER NUMBER

2625

MAIL DATE

DELIVERY MODE

06/23/2009

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/576,232	HAMASHIMA ET AL.	
	Examiner	Art Unit	
	SUNIL CHACKO	2625	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 24 March 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-13, 15-19, 21-27 and 37-43 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-13, 15-19, 21-27 and 37-43 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>02/20/2009 & 01/16/2009</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Amendment

1. Applicant's amendment filed on 3/24/2009 has been entered. Claims 1-13, 15-19, 21-27 & 40-43 have been amended. Claims 14, 20 & 28-36 have been canceled. Claims 1-13, 15-19, 21-27 & 37-43 are still pending in this application, with claims 1, 6, 11-13, 19, 22-25 & 27 being independent.

Response to Arguments

2. Applicant's arguments with respect to claims 1-13, 15-19, 21-27, & 37-43 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S.

Art Unit: 2625

patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

4. Claims 13, 15-19, 21, & 39 are rejected under 35 U.S.C. 102 (e) as being unpatentable by Freeny et al (US # 6,806,977 B1).

As to Claim 13

Freeny et al teaches *an image output apparatus comprising:*

- *an input element for inputting an image data from a recording medium;*
(see column 7 lines 33-35)
- *a display condition specifying element for displaying selection items for each display condition and specifying the display condition through selection of a selection item,* (Freeny teaches that his multiple integrated machine system has a display condition specifying element, which controls items that can be seen, See column 21 and lines 42-45 and lines 50-53)
- *the display condition specifying element displaying at least one representative image data matching the display conditions, while relating it to the selection item, and switching the representative image data;*
(Freeny describes a user GUI that is used to select an image, when

Art Unit: 2625

selected the image appears, switches to the representative image data, see Fig. 6 and column 21 lines 35-45)

- *display element for displaying the image data based on the display conditions; and output element for printing out the image data. (See column 7 lines 35-40)*

As to Claim 15 (which depends on claim 13)

Freemy et al. *an image output apparatus,*

- *wherein the display condition specifying element switches the representative image data every time a predetermined time passes.*
(Freemy et al. teaches that his image output apparatus uses a predetermined Graphical User Interface program such as MS Word. MS Word has a screensaver function which occurs after a predetermined time passes; see column 21 lines 49-55.)

As to Claim 16 (which depends on claim 13)

Freemy et al. further teaches *an image output apparatus,*

- *wherein the display condition specifying element displays the representative image data along with information regarding the image data matching the display conditions, while relating it to the selection item.*
(Freemy et al. teaches display conditions that have representative image data conditions such as Directory and File names, to view the desired files, See column 23 lines 15-19 and Fig 6. Freemy also teaches that the

Art Unit: 2625

file information will be automatically displayed; See column 23 lines 28-31.)

As to Claim 17 (which depends on 16)

Freeny et al further teaches *an image output apparatus,*

- *wherein the display conditions include at least one of date, year, month, week, time of photographing or creation of the image data. (Freeny et al. teaches that his image output apparatus uses a predetermined Graphical User Interface program such as MS Word. MS Word has the display conditions that include date, year, month, week, and time of photographing or creation of image data, See column 21 lines 49-55.)*

As to Claim 18 (which depends on claim 13)

Freeny et al further teaches *an image output apparatus,*

- *wherein the display condition specifying element displays the representative image data along with a calendar such that the representative image data are displayed on a calendar (Freeny et al. teaches that his image output apparatus uses a predetermined Graphical User Interface program such as MS Word. MS Word also as the capability of the calendar feature, See column 21 lines 49-55.)*

As to Claim 19

Art Unit: 2625

Freeny et al. teaches *an image display method performed by an image output apparatus that prints out image data read out from a recording medium, comprising:*

- (a) displaying step for displaying selection items for each display condition and specifying the display condition through selection of a selection item,
(Freeny teaches that his multiple integrated machine system has a display condition specifying element, which controls items that can be seen, See column 21 and lines 42-45 and lines 50-53)
- the displaying step displaying at least one representative image data matching the display conditions, while relating it to the selection item, and switching the representative image data; and (Freeny describes a user GUI that is used to select an image, when selected the image appears, switches to the representative image data, see Fig. 6 and column 21 lines 35-45)
- (b) displaying step for displaying the image data based on the display conditions. (See column 7 lines 35-40)

As to Claim 21 (which depends on claim 19)

An image display method,

- wherein the step (a) displays at least one representative image data matching the display conditions, while relating it to the selection item, and switches the representative image data every time a predetermined time passes. (Freeny et al. teaches that his image output apparatus uses a

Art Unit: 2625

predetermined Graphical User Interface program such as MS Word. MS Word has a screensaver function which occurs after a predetermined time passes; see column 21 lines 49-55.)

As to Claim 39 (which depends on claim 13)

- *A recording medium on which is recorded a program which causes a computer to function as the image output apparatus. (See Freeny et al. column 15 lines 5-10)*

5. Claims 22-24 & 40-42 are rejected under 35 U.S.C. 102 (e) as being unpatentable by Ferlitsch (US # 6,806,977 B1).

As to Claim 22

Ferlitsch teaches *an image printing system having a plurality of image output apparatuses, each apparatus having an input element for inputting image data[:], an instruction element for instructing by an operator to print out[:], and a printing element for printing out image data using a printing device, comprising:* (See Fig. 2 and column 8 lines 23-31)

- *assigning element for assigning the image data to the printing device of at least one of the image output apparatuses, where the assigning element preferentially assigns the image data to be printed to the printing device that has printed out the least number of image data among the printing*

Art Unit: 2625

devices. (See column 8 lines 34-35)

As to Claim 23

Ferlitsch teaches *an image printing system having a plurality of image output apparatuses, each apparatus having an input element for inputting image data[;], an instruction element for instructing by an operator to print out[;], and a printing element for printing out image data using a printing device, comprising:* (See Fig. 2 and column 8 lines 23-31)

- *assigning element for assigning the image data to the printing device of at least one of the image output apparatuses, where the assigning element assigns the same image data to the same printing device.* (See column 8 lines 34-35)

As to Claim 24

Ferlitsch teaches *an image printing system having a plurality of image output apparatuses, each apparatus having an input element for inputting image data[;], an instruction element for instructing by an operator to print out[;], and a printing element for printing out image data using a printing device, comprising:* (See Fig. 2 and column 8 lines 23-31)

- *assigning element for assigning the image data to the printing device of at least one of the image output apparatuses, where the assigning element assigns a smaller percentage of image data to a certain printing device than to other printing devices.* (Ferlitsch teaches that printer driver

Art Unit: 2625

chooses the best fit printer to print the print jobs, it is inherent with this feature that the best fit printer in the system would get the majority of print jobs, See column 10 lines 6-14 & column 4 lines 43-45)

As to Claim 40 (which depends on claim 22)

- Ferlitsch teaches *a recording medium on which is recorded a program which causes a computer to function as the image printing system*. (See column 6 lines 5-13)

As to Claim 41 (which depends on claim 23)

- Ferlitsch teaches *a a recording medium on which is recorded a program which causes a computer to function as the image printing system*. (See column 6 lines 5-13)

As to Claim 42 (which depends on claim 24)

- Ferlitsch teaches *a recording medium on which is recorded a program which causes a computer to function as the image printing system*. (See column 6 lines 5-13)

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to

Art Unit: 2625

be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

8. Claims 1, 2, 6, 7-12, & 37-38 are rejected under U.S.C. 103(a) as being unpatentable over Hasegawa et al. (US Application #2002/0054112 A1) in view of Wu et al. (US Application #2004/0066529 A1)

As to Claim 1

Hasegawa et al. teaches *an image output apparatus comprising:*

- an input element for inputting image data from a recording medium; (See Fig. 2 element 207 & paragraph 94)
- an output element for printing out the image data; (See Fig. 2 element 214)
- an instruction element that receives an instruction from an operator to display selected image data input from the recording medium; a display

Art Unit: 2625

element that displays the selected image data based on the instruction received by the instruction element; (See paragraph 96)

Hasegawa et al. does not explicitly teach the following limitations:

- a temporary storage section that holds the selected image data that has been displayed on the display element as already-displayed image data;
and
- a control section that decides an order of priority in which non-selected image data is to be held in the temporary storage section, controls the input element to read the non-selected image data from the recording medium, controls the temporary storage section to hold the non-selected image-data according to the decided order with the already-displayed image data, and controls the display element to read the image data from the temporary storage section and to display the image data.

However, Wu et al. teaches an image forming device and method that is capable of efficiently using storage space. Wu et al. teaches a work memory that reads on temporary storage. Wu et al teaches there “some regions in the RAM which are secured or reserved for displayed content data”, see paragraph 43. Wu et al also teaches that the image data can be gathered from a recording medium such as a computer, See Fig. 2 element 201. Wu et al. also teaches that the working memory stores images based on the priority of image size and the amount free space available in the RAM, see paragraph 42. Wu et al. also teaches memory management function, see paragraph 37 and Fig. 3 element 16. Wu et al. teaches that the memory management function is responsible for holding and

Art Unit: 2625

deleting the images both selected and non-selected, which reads on outputted or not outputted. It would have been obvious, at the time of the invention, to one skilled in the art to combine Hasegawa et al. in view of Wu et al. because it would provide the user with image outputting apparatus that would efficiently use its memory, so that images could be printed quickly.

As to Claim 2 (which depends on claim 1)

Hasegawa et al does not explicitly teach *an image output apparatus,*

- *wherein the control section controls the temporary storage element to delete the image data from the temporary storage section, according to a predetermined limitation.*

However, Wu et al. teaches an image forming device and method that is capable of efficiently using storage space. Wu et al. also teaches memory management function, which reads on control section, see paragraph 37 and Fig. 3 element 16. Wu et al. also teaches a predetermined limitation of deleting data that is no longer seen as necessary by the image forming device, See paragraph 42. It would have been obvious, at the time of the invention, to one skilled in the art to combine Hasegawa et al. in view of Wu et al. because it would provide the user with image outputting apparatus that would efficiently use its memory, so that images could be printed quickly.

As to Claim 6

Hasegawa et al. teaches *an image output apparatus comprising:*

Art Unit: 2625

- an input element for inputting an image data from a recording medium;
(See Fig. 2 element 207 & paragraph 94)
- an instruction element that receives an instruction from an operator to display selected image data input from the recording medium; a display element that displays the selected image data based on the instruction received by the instruction element; (See paragraph 96)
- a first temporary storage section that holds already-displayed image data;
(See paragraph 108 and Fig. 1 element 104)

Hasegawa et al. does not explicitly teach the following limitations:

- a second temporary storage section that holds image data that has been designated to be printed out;
- a control section that controls the second temporary storage section to read already-displayed image data from the first temporary storage section if the first temporary storage section contains already-displayed image data and, controls the second temporary storage section to read image data from the recording medium and hold the image-data in the second temporary storage section if the first temporary storage section does not contain already- displayed image data; and
- an output element for reading the image data from the second temporary storage section and printing out the read image data on at least one printing device.

However, Wu et al. teaches an image forming device and method that is capable of efficiently using storage space. Wu et al. teaches a work memory that reads

Art Unit: 2625

on temporary storage. Wu et al teaches there “some regions in the RAM which are secured or reserved for displayed content data”, see paragraph 43. Wu et al also teaches that the image data can be gathered from a recording medium such as a computer, See Fig. 2 element 201. Wu et al. also teaches that the working memory stores images based on the priority of image size and the amount free space available in the RAM, see paragraph 42. Wu et al. also teaches memory management function, see paragraph 37 and Fig. 3 element 16. Wu et al. teaches that the memory management function is responsible for holding and deleting the images both selected and non-selected, which reads on outputted or not outputted. Wu et al. also teaches that the image data after being placed in the temporary storage is sent to a printer to be outputted, See Fig. 2 element 202. It would have been obvious, at the time of the invention, to one skilled in the art to combine Hasegawa et al. in view of Wu et al. because it would provide the user with image outputting apparatus that would efficiently use its memory, so that images could be printed quickly.

As to Claim 7 (which depends on claim 6)

Hasegawa et al. does not explicitly teach *an image output apparatus,*

- *wherein when printout is designated from a list by the display section, the control section controls the second temporary storage section to read image data to be printed out from the recording medium in advance before start of a printout process*

Art Unit: 2625

However, Wu et al. teaches an image forming device and method that is capable of efficiently using storage space. Wu et al. also teaches memory management function, which reads on control section, see paragraph 37 and Fig. 3 element 16. Wu et al. further teaches that before a image is printed out it is placed in RAM from the HDD and then deleted from the RAM when the information is no longer necessary, see paragraph 42 & abstract. It would have been obvious, at the time of the invention, to one skilled in the art to combine Hasegawa et al. in view of Wu et al. because it would provide the user with image outputting apparatus that would efficiently use its memory, so that images could be printed quickly.

As to Claim 8 (which depends on claim 6)

Hasegawa et al. does not explicitly teach *an image output apparatus,*

- *wherein the control section controls the second temporary storage section or to delete the image data from the second temporary storage section[[,]] according to a predetermined limitation.*

However, Wu et al. teaches an image forming device and method that is capable of efficiently using storage space. Wu et al. also teaches memory management function, which reads on control section, this memory management controls the temporary storage section, see paragraph 37 and Fig. 3 element 16. Wu et al. further teaches that before a image is printed out it is placed in RAM from the HDD and then deleted from the RAM when the information is no longer necessary, see paragraph 42 & abstract. It would have been obvious, at the

Art Unit: 2625

time of the invention, to one skilled in the art to combine Hasegawa et al. in view of Wu et al. because it would provide the user with image outputting apparatus that would efficiently use its memory, so that images could be printed quickly.

As to Claim 9 (which depends on claim 8)

Hasegawa et al. does not explicitly teach *an image output apparatus,*

- *wherein the control section sets the predetermined limitation by specifying at least one of a maximum holding number of image data and a maximum storage amount.*

However, Wu et al. teaches an image forming device and method that is capable of efficiently using storage space. Wu et al. also teaches memory management function, which reads on control section, this memory management controls the temporary storage section, see paragraph 37 and Fig. 3 element 16. WU et al. teaches that a predetermined limitation of which data is kept in the storage is the maximum storage amount, See paragraph 42. If maximum storage amount is predetermined limitation it is would be inherent that the maximum holding number image data would be also be a predetermined limitation. It would have been obvious, at the time of the invention, to one skilled in the art to combine Hasegawa et al. in view of Wu et al. because it would provide the user with image outputting apparatus that would efficiently use its memory, so that images could be printed quickly.

As to Claim 10 (which depends on claim 8)

Art Unit: 2625

Hasegawa et al. does not explicitly teach *an image output apparatus,*

- *wherein the control section calculates the predetermined limitation on the basis of the capacity of the second temporary storage section or the number of the printing devices.*

However, Wu et al. teaches an image forming device and method that is capable of efficiently using storage space. Wu et al. also teaches memory management function, which reads on control section, this memory management controls the temporary storage section, see paragraph 37 and Fig. 3 element 16. WU et al. teaches that a predetermined limitation of which data is kept in the storage is the maximum storage amount, See paragraph 42. If maximum storage amount is predetermined limitation it is would be inherent that the maximum holding number image data would be also be a predetermined limitation. The memory management control these calculations. It would have been obvious, at the time of the invention, to one skilled in the art to combine Hasegawa et al. in view of Wu et al. because it would provide the user with image outputting apparatus that would efficiently use its memory, so that images could be printed quickly.

As to Claim 11

Hasegawa et al. teaches *an image display method performed by an image output apparatus that prints out image data read out from a recording medium, comprising:* (See Fig. 1)

- *receiving an operator instruction with an instruction element to display image data;* (See Fig. 2 element 207 & paragraph 94)

- displaying the image data based on the received operator instruction;

(See Fig. 2 element 214)

Hasegawa et al. does not explicitly teach the following limitations:

- holding already-displayed image data in a storage section;
- deciding an order of priority in which image-data recorded in the recording-medium is held in the storage section with a decision element; reading from the recording medium and holding in a temporary storage element image- data that is not instructed by the operator instruction to be displayed according to the order decided by the decision element; and reading [[an]] image data from the temporary storage section and displaying the read image data.

However, Wu et al. teaches an image forming device and method that is capable of efficiently using storage space. Wu et al. teaches a work memory that reads on temporary storage. Wu et al teaches there “some regions in the RAM which are secured or reserved for displayed content data”, see paragraph 43. Wu et al also teaches that the image data can be gathered from a recording medium such as a computer, See Fig. 2 element 201. Wu et al. also teaches that the working memory stores images based on the priority of image size and the amount free space available in the RAM, see paragraph 42. Wu et al. also teaches memory management function, see paragraph 37 and Fig. 3 element 16. Wu et al. teaches that the memory management function is responsible for holding and deleting the images both selected and non-selected, which reads on outputted or not outputted. It would have been obvious, at the time of the invention, to one

Art Unit: 2625

skilled in the art to combine Hasegawa et al. in view of Wu et al. because it would provide the user with image outputting apparatus that would efficiently use its memory, so that images could be printed quickly.

As to Claim 12

Hasegawa et al. teaches *an image display method performed by an image output apparatus that prints out image data read out from a recording medium, comprising:* (See Fig. 1)

- receiving an operator instruction with an instruction element to display image data; (See Fig. 2 element 207 & paragraph 94)
- displaying the image data based on the received operator instruction; (See Fig. 2 element 214)
- holding in a first storage section already-displayed image data; (See paragraph 108 and Fig. 1 element 104)

Hasegawa et al. does not explicitly teach the following limitations:

- *holding in a second temporary storage section image data to be printed out;*
- controlling the second temporary storage section to read already-displayed image data from the first temporary storage section if the first temporary storage section contains already- displayed image data, and controlling the second temporary storage section to read image data from the recording medium and hold the image-data in the second temporary

Art Unit: 2625

storage section if the first temporary storage section does not contain already-displayed image data; and

- *reading the image data from the second temporary storage section and printing out the image data.*

However, Wu et al. teaches an image forming device and method that is capable of efficiently using storage space. Wu et al. teaches a work memory that reads on temporary storage. Wu et al teaches there “some regions in the RAM which are secured or reserved for displayed content data”, see paragraph 43. Wu et al also teaches that the image data can be gathered from a recording medium such as a computer, See Fig. 2 element 201. Wu et al. also teaches that the working memory stores images based on the priority of image size and the amount free space available in the RAM, see paragraph 42. Wu et al. also teaches memory management function, see paragraph 37 and Fig. 3 element 16. Wu et al. teaches that the memory management function is responsible for holding and deleting the images both selected and non-selected, which reads on outputted or not outputted. Wu et al. also teaches that the image data after being placed in the temporary storage is sent to a printer to be outputted, See Fig. 2 element 202. It would have been obvious, at the time of the invention, to one skilled in the art to combine Hasegawa et al. in view of Wu et al. because it would provide the user with image outputting apparatus that would efficiently use its memory, so that images could be printed quickly.

As to Claim 37 (which depends on claim 1)

Art Unit: 2625

- Hasegawa et al further teaches *a recording medium on which is recorded a program which causes a computer to function as the image output apparatus.* (See paragraph 115)

As to Claim 38 (which depends on claim 6)

- Hasegawa et al further teaches *a recording medium on which is recorded a program which causes a computer to function as the image output apparatus.* (See paragraph 115)

9. Claims 3-5 are rejected under U.S.C. 103(a) as being unpatentable over Hasegawa et al. (US Application #2002/0054112 A1) in view of Wu et al. (US Application #2004/0066529 A1) in further view of Ishii et al. (US Patent # 5,598,279)

As to Claim 3 (which depends on claim 2)

Hasegawa et al. in view of Wu et al. does explicitly teach *an image output apparatus,*

- *wherein the control section decides sets a priority order of non-displayed image data for subsequent display higher than those of other non-displayed image data.*

However, Ishii et al. teaches a device with an automatic deletion of data feature.

Ishii et al. teaches that device can determine whether or not a user has accessed data, and then delete the data according to that determination, see column 14

Art Unit: 2625

lines 57-67. It would have been obvious, at the time of the invention, to one skilled in the art to combine Hasegawa et al. in view of Wu et al. and in further view of Ishii et al. because it would enable limited memory systems to work efficiently and eliminated unwanted data consumption .

As to Claim 4 (which depends on claim 2)

Hasegawa et al. in view of Wu et al. does explicitly teach *an image output apparatus,*

- *wherein the control section sets the priority order of non-displayed detailed image data or non-displayed simplified image data corresponding to a selected already-displayed image data or an already-displayed image data in the vicinity there of higher than those of other non-displayed image data.*

However, Ishii et al. teaches a device with an automatic deletion of data feature. Ishii et al. teaches that device can determine whether or not a user has accessed data, and then delete the data according to that determination, see column 14 lines 57-67. It would have been obvious, at the time of the invention, to one skilled in the art to combine Hasegawa et al. in view of Wu et al. and in further view of Ishii et al. because it would enable limited memory systems to work efficiently and eliminated unwanted data consumption .

As to Claim 5 (which depends on claim 2)

Art Unit: 2625

Hasegawa et al. in view of Wu et al. does explicitly teach *an image output apparatus,*

- wherein the control section sets the predetermined limitation by at least one of a maximum holding number of already-displayed image data or non-displayed image data and the a maximum storage amount.

Wu et al. teaches the a memory management system, which reads on a control section setting a predetermined limitation, See paragraph 37. Wu et al. also teaches a predetermined limitation of deleting data that is no longer seen as necessary by the image forming device, See paragraph 42. Wu et al also teaches that the maximum storage amount is accounted for in this predetermined limitation, See paragraph 42. However, Wu et al does not explicitly teach that “*maximum holding number of already-displayed image data or non-displayed image data*” information is considered. However, Ishii et al teaches a device with an automatic deletion of data feature. Ishii et al. teaches that device can determine whether or not a user has accessed data, and then delete the data according to that determination, see column 14 lines 57-67. It would have been obvious, at the time of the invention, to one skilled in the art to combine Hasegawa et al. in view of Wu et al. and in further view of Ishii et al. because it would enable limited memory systems to work efficiently and eliminated unwanted data consumption .

Art Unit: 2625

10. Claims 25, 27, & 43 are rejected under U.S.C. 103(a) as being unpatentable over Ferlitsch (US Patent #6,943,905 B2) in view of Ishii et al. (US Patent # 5,598,279)

As to Claim 25

Ferlitsch teaches *an image printing system having a plurality of image output apparatuses, each apparatus having an input element for inputting image data[;], an instruction element for instructing by an operator to print out[;], a printing element for printing out image data using a printing device,* (See Fig. 2 and column 8 lines 23-31)

- *an assigning element for assigning the image data to the printing device of at least one of the image output apparatuses; and* (See column 8 lines 34-35)

However Ferlitsch does explicitly teach the following limitations:

- *and a removal opening corresponding to the printing device, comprising:*
- *a printed item conveying device for conveying printed items to a predetermined removal opening.*

However, Ishii et al teaches a "Sorter C" that has several bins (See Fig.1 111a-111x), which reads on removal openings. Ishii also teaches that there are rollers that feed the printed material to the appropriate bins or removal openings see column 6 lines 30-37 and Fig 1. It would have been obvious, at the time of the invention to combine Ferlitsch in view of Ishii et al. because it would provide a

Art Unit: 2625

printing system that consisted of printers which could provide printed material in an orderly manner.

As to Claim 27

Ferlitsch teaches *an image output method performed by an image printing system having a plurality of image output apparatuses ,each apparatus having an input element for inputting image data, an instruction element for instructing by an operator to print out, a printing element for printing out image data using a printing device, and a removal opening corresponding to the printing device, comprising:* (See Fig. 2 and column 8 lines 23-31)

- *assigning the image data to the printing devices of at least one of the image output apparatuses; and* (See column 8 lines 34-35)

However Ferlitsch does explicitly teach the following limitations:

- conveying printed items to a predetermined removal opening among the removal openings.

However, Ishii et al teaches a "Sorter C" that has several bins (See Fig.1 111a-111x), which reads on removal openings. Ishii also teaches that there are rollers that feed the printed material to the appropriate bins or removal openings see column 6 lines 30-37 and Fig 1. It would have been obvious, at the time of the invention to combine Ferlitsch in view of Ishii et al. because it would provide a printing system that consisted of printers which could provide printed material in an orderly manner.

Art Unit: 2625

As to Claim 43 (which depends on claim 25)

- Ferlitsch teaches a *recording medium on which is recorded a program which causes a computer to function as the image printing system*. (See column 6 lines 5-13)

11. Claim 26 is rejected under U.S.C. 103(a) as being unpatentable over Ferlitsch (US Patent #6,943,905 B2) in view of Ishii et al. (US Patent # 5,598,279) and in further view of Kuo (US Patent # 5,513,013)

As to Claim 26 (which depends on claim 25)

Ferlitsch in view of Ishii et al does not explicitly teach *an image printing system*,

- *further comprising removal-opening open close element for opening an open and close flap of the predetermined removal opening and closing those of all other removal openings.*

However, Kuo teaches a Facsimile output job sorting unit that is capable of closing all bins or flaps so that all the output will exit out on open flap, or bin, See Fig 8 and see column 21 lines 40-45 It would have been obvious, at the time of the invention, to one of ordinary skill in the art to combine, Ferlitsch in view of Ishii and in further view of Kuo because combining the three inventions would ensure a multiple integrated machine that would provide customers with more printing options and the ability to organize the output print jobs.

Conclusion

Art Unit: 2625

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to SUNIL CHACKO whose telephone number is (571)270-7221. The examiner can normally be reached on Mon-Thurs 8AM-6PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Benny Q. Tieu can be reached on 571-272-7490. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2625

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/SUNIL CHACKO/
Examiner, Art Unit 2625

/Benny Q Tieu/
Supervisory Patent Examiner, Art Unit 2625